

161815

Tuesday, May 23, 2017 10:55:14 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 5/31/2017 **Start Qty:** 1.00

1

Cust Item ID:

Required Date: 6/2/2017 **Req'd Qty:** 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date: _____

~~MAY 23 2017~~

7 Tooling:

Date:

Run Start *NR1*

QC:

Date: _____

SPC (Y/N):

Date:

Stop ***NR2***

[illegible]

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																							
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :	
Misidentified ☐	Past Due ☐																																																														

Work Order ID 161815***161815***

Page 2

Tuesday, May 23, 2017 10:55:14 AM

Item ID: D412-705-019

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: C-Box Oil Cooler Line Access

Start Date: 5/31/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/2/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

130

Packaging

Packaging

Identify as per dwg & Stock Location: _____

0.00

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D412-705-019
Location: FG027DAS
28
9-89

MAY 31 2017

140

140

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.10

DAS
21
9-89

MAY 31 2017

DAS
21
9-89

MAY 31 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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OTHER : _____																									

Picklist Print

Tuesday, May 23, 2017 10:55:12 AM

Page 1
11

Work Order ID: 161815

161815

Parent Item: D412-705-019

D412-705-019

Parent Item Name: C-Box Oil Cooler Line Access

Start Date: 5/31/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:D Removed Manufacturing 06-06-28 JLM
IPP Rev:E ECN 1052 07-11-06 DD verified by: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3259-041 *D3259-041* Access Panel Assembly LH		Manufactured	No			110	Each	2.0000	1	1			DAS 26 9-89
									**				DAS 27 9-89
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			MAY 30 2017
					ST491			2					
					151801			2					
D3259-042 *D3259-042* Access Panel Assembly RH		Manufactured	No			110	Each	2.0000	1	1			DAS 26 9-89
									**				DAS 27 9-89
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			MAY 30 2017
					ST491			2					
					151778			2					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Work Order ID 161815

Tuesday, May 23, 2017 10:55:14 AM

161815

Page 1

Item ID: D412-705-019

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: C-Box Oil Cooler Line Access

Stop ***NS2***

Start Date: 5/31/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 6/2/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date:

MAY 23 2017

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
----------	--------------

IIN D412-705

F

DAS

MAY 30 2017

100

Document Control

0

0.00

100

DOCUMENT CONTROL

0.00

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D412-705-019

CHG002

CB

MAY 30 2017

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.03

Quality Control



Transport Canada

Transports Canada

Department of Transport

Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: SH04-25**Issue No.:** 1**Approval Date:** April 21, 2004**Issue Date:** April 21, 2004**Responsible Office:**

Prairie and Northern

Aircraft/Engine Type or Model:

BELL 212, 412, 412 CF, 412 EP

Canadian Type Certificate or Equivalent:

H-86

Description of Type Design Change:

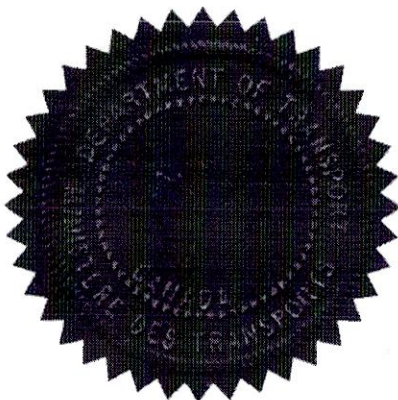
TWIN PAK EASY ACCESS KITS

**Installation/Operating Data,
Required Equipment and Limitations:**

Installation of Twin Pak E-Z Access Kit to be in accordance with Transport Canada approved DART AEROSPACE LTD. Installation Instructions, IIN-D412-705, Revision A, dated February 20, 2004 or later Transport Canada approved revision.

Instructions for Continuing Airworthiness described in DART AEROSPACE LTD. document number ICA-D412-705, Initial Issue dated March 09, 2004 or later revision are required with this installation.

— End —



Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.

Greg Oucharek
For Minister of Transport

Canada

5.0 PARTS LIST

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Part Number	Description
X							D412-705-011	TWIN PAK E-Z ACCESS KIT
1	X						D412-705-013	INTAKE PLENUM ACCESS PANEL KIT
1		X					D412-705-015	DRIVESHAFT TUNNEL MODIFICATION KIT
1			X				D412-705-017	N1 GEARBOX ACCESS PANEL KIT
1				X			D412-705-019	C-BOX OIL COOLER LINE SUPPORT ACCESS KIT
1					X		D412-705-021	OIL PRESSURE TRANSMITTER ACCESS KIT
1						X	D412-705-023	OIL COOLER SUPPORT REMOVABLE LOWER PANEL KIT
	1						D3245-041	ACCESS PANEL ASSEMBLY, LH
	1						D3245-042	ACCESS PANEL ASSEMBLY, RH
	2						D3245-043	DOOR ASSEMBLY
	2						D3245-9	GASKET
	2						D3245-11	GASKET
	2						D3245-13	GASKET
			1				D3255-041	ACCESS PANEL ASSEMBLY, LH
			1				D3255-042	ACCESS PANEL ASSEMBLY, RH
		1					D3256-1	ACCESS PANEL
		1					D3256-3	GASKET
				1			D3259-041	ACCESS PANEL ASSEMBLY, LH
				1			D3259-042	ACCESS PANEL ASSEMBLY, RH
					1		D3307-041	ACCESS PANEL ASSEMBLY
						30	AN3-3A	BOLT
		22	30		6		AN3C3A	BOLT
		3					AN3C4A	BOLT
						30	AN960JD10	WASHER
	16	44	36		12		MS20427M3-3	* RIVET
						4	MS21051-L3K	NUT PLATE
	8	22	18		6		MS21060-L3K	NUT PLATE
						18	MS21069-L3K	NUT PLATE
		25	30		6		MS9321-09	WASHER

* Acceptable to substitute for MS20615M3-3 rivets. At installation, it is acceptable to use longer rivets if required.